



# **Pedagogical and Assessment Practices towards Competency-based Education in Tanzania Teacher Colleges**

**Vitalis E. Mwakyobwe <sup>a\*</sup> and Magreth C. K. Shawa <sup>b</sup>**

<sup>a</sup> Agency for Development of Educational Management (ADEM), Tanzania.

<sup>b</sup> National Council for Technical and Vocational Education Training (NACTVET), Tanzania.

## **Authors' contributions**

*This work was carried out in collaboration between both authors. Both authors read and approved the final manuscript.*

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## **ABSTRACT**

The study sought to investigate the pedagogical and assessment practices to enhance Competency Based Curriculum in Tanzania Teacher Colleges. Specifically, the study explored tutors' understanding of the subject competencies as described in teacher education curriculum, examined the competency-based teaching and learning techniques used by tutors in Teacher Colleges and evaluated the tools used by tutors to assess the mastery of the built competencies in Teacher Colleges. The study was conducted in two Teacher colleges in Mbeya Region. A qualitative research approach and descriptive survey design were employed in which data were collected through questionnaires, semi-structured interviews, and focus group discussions from 50 respondents sampled purposely from curriculum practitioners in Teacher Colleges. Questionnaire data were subjected into Statistical Package for Social Sciences (SPSS) software version 20 to get frequencies and percentages then supported by verbatim quotes from interview and thematic paraphrase from Focus Group Discussions. The results indicates that, most of the tutors were aware of the competencies to be developed to students and the competency-based teaching and learning techniques in their respective teaching subjects as prescribed in the teacher education

\*Corresponding author: Email: [vmwakyobwe@gmail.com](mailto:vmwakyobwe@gmail.com);

curriculum. However, such tutors rarely employed the competency-based teaching and learning techniques in their lessons which hamper the development of the intended competencies in the teacher education programme. Therefore, the study concludes that, since the river cannot flow higher than its source, tutors' understanding of the intended competencies and the competency-based teaching and learning techniques without actual use of such techniques does not impact on the preparation of the competent teachers required to implement competency-based curriculum in schools. From this conclusion, it is recommended that, in-service training for Competency-based teaching should be conducted to all tutors and Management of Teacher Colleges. The practical interview should be conducted to the applicants for tutorship in Teacher Colleges instead of relying on direct placement from University graduates or transferring teachers from schools to Teacher Colleges based on their level or years of experiences. In light of the findings and conclusion of this study, further study may be conducted on developing measuring scales for competency development in teacher education.

*Keywords: Pedagogical; assessment; competency-based teaching; and teacher colleges.*

## 1. INTRODUCTION

In a modern industrial society, education and professional qualifications can no longer be described according to a rigid standard of knowledge in a specific subject based from one generation to another [1]. Thus, the shift from a Content-Based Curriculum to a Competency-Based Curriculum in Tanzania in the early 2000s can be described as a result of both national and global influences. Hartig, Klieme, and Leutner, [1] maintain that building competencies have been identified as the main objective of education systems and are a driving force for the shift from knowledge acquisition to knowledge application. Knowledge acquisition focused on a narrow set of academic outcomes and fails to recognize that a student's success depends on a full range of foundation skills, including social-emotional and the application of skills [2,3]. In such a regard, the change from a content-based curriculum to a competency-based curriculum is thought to be more relevant to the current market demand [2].

Studies [4] maintain further that, the competency-based curriculum has significance in the development of science and technology as it produces graduates who are more competent as per employers' requirements. This signifies that competency-based teaching emphasizes the development of competencies to learners instead of grades and focuses on the real-world aspect of applying the knowledge rather than just on the ability to recall the knowledge [5]. Thus, it limits the traditional methods of teaching and learning and assessments, and the roles of teachers should reflect competency-based assessment in order to incorporate outcome-based learning rather than a theoretical understanding of concepts [1,6,3].

A study by Idrissi, Hnida and Bennani [7], defined competency-based assessment as the measure of a learner's competency against a standard of performance. In such regard, a competency-based curriculum requires multiple ways of assessing learners in order to determine their competencies [3]. To implement these changes, it is mandatory for teachers to be knowledgeable and equipped with new alternative approach essential for assessments as the implementation of a Competency-based curriculum, depends on the teacher's ability to prepare and carry out teaching-learning activities effectively [8,3]. This indicates that, for a successful implementation of a competency based curriculum, a school should have qualified teachers with sufficient and appropriate knowledge and skills [2].

It appears that the need for changes in the instructional and assessment approach, calls for mandatory intervention to the need to equip teachers with the necessary competencies for handling new teaching-learning processes [9]. Teacher Colleges as training institutions mandated to prepare teachers focusing on learning outcomes that constantly improve academic programs hence meeting the labor market demands. Therefore, the assessments of students should focus on collecting evidences about the everyday progress of their learning and provide them with information about the teaching and learning processes [10].

In this light, tutors should understand the competencies intended to be developed to student-teachers, teaching and learning techniques as well as the use of different assessment tools necessary for teaching and learning processes to ensure pre-service teachers' mastery of competencies [11-13].

Studies further, show that students' mastery of competency, needs to be assessed more than one time with the use of multiple assessment methods including multiple-choice, tests, performance-based real-world assessments, portfolios, and projects [5]. In this sense, formative assessment is a key strategy for improving the quality of teaching and learning processes in Teacher Colleges since it allows student-teachers to be assessed as tutors continue to teach.

Furthermore, the use of multiple assessment methods allows student-teachers to reflect, regulate and monitor their learning progress, evaluate their own learning and get feedback [14]. In the same light, tutors are obliged to consider students' assessment as an ongoing process in which their competencies are continuously built and assessed, and are expected to be observed when employed. The ability of students to think and act in terms of relevant competencies that are aimed at preparing students who are confident, critical, creative, and innovative thinkers depends largely on assessment methods employed by tutors [14]. It appears that, classroom teaching should shift from being centred on lectures, pencil and paper tests, because what is important in the competency-based assessment is that, a learner should be practical and promote the subject of their own learning [15].

However, despite seventeen years of implementing a competency-based curriculum in Tanzania, recent pieces of literature [16,17] state that the practice of learner assessment from primary to secondary schools has basically centred on passing examinations. Student assessment is still taken as the stepping stone for formal employment and not the means of equipping useful and applicable competencies to a learner's life. The focus of classroom teaching and learning processes has remained the same, enabling students to memorize the facts taught and reproduce them in examinations to qualify for further studies and formal jobs [18-20]. It has been observed further that, the majority of teachers have a narrow understanding of competency-based curriculum and poor pedagogical skills due to little or no training on competency-based curriculum, hence, the use of traditional methods of teaching and assessment is still dominant [16,17,21,22,6,2,23]. This suggests that teachers in both primary and secondary schools are not implementing a competency-based curriculum.

Similarly, Nzima [8] maintains that teachers' instructional practices can easily be described as teacher-centered and theoretical based instructions rather than learner-centred as the new curriculum emphasizes. He added that, the lecture method dominated instructional characteristics by strong framing and classifications. The study by Makunja, [24] notes that the majority of teachers lacked the requisite knowledge for implementing a competency-based curriculum during the teaching and learning process. Kafyulilo et al. [6] further observed that, pre-service teachers perceived their understanding and ability to implement competency-based teaching approach as high, but during interviews, it was revealed that, they had difficulties in explaining some competency-based concepts. This gives the view that pre-service teachers had an inadequate understanding of the competency-based curriculum. Moreover, it was noted further that competency-based teaching approach is not well implemented in Tanzania schools and more efforts need to be devoted to the training of teachers.

A study by Rutayuga [4] observed that the weakness of competency-based education in Tanzania is the competency of teachers. The preparation of teachers to take off this kind of system is not adequately done. He added that the way teachers teach and assess the competencies of their students is problematic as they teach somehow competency-based and somehow knowledge-based; so, it is confusing. This infers that, teachers who are the key implementers of curriculum seem to have inadequate knowledge and skills to implement competency-based teaching and learning. Consequently, it can be interpreted that, the teaching is teacher-centered as students are less engaged in learning activities as opposed to social constructivism learning theory. As long as Teacher Colleges prepare both primary and secondary school teachers, this paper seeks to investigate the current practices of Competency-Based Education (CBE) in Tanzania Teacher Colleges.

## 2. THEORETICAL UNDERPINNING

The change from traditional teaching to competency-based teaching meant that teachers must make important paradigm shifts in their views of knowledge and learning, and re-think their current teaching strategies in light of these new ideas [25,26]. In this regard, the current

study is guided by the social constructivism learning theory that insists students to engage in the process of teaching and learning and construct their own competencies. Berry, [26], states that, for students to be actively engaged in creating their own understanding, they must learn to be critical assessors who make sense of information, relate it to prior knowledge, and use it for new learning. Woolfolk (1993:485) as cited in Tam, [27], the key idea of constructivism is that, students actively construct their own knowledge: the mind of the student mediates input from the outside world to determine what the student will learn. Similarly, Tam [28] further argues that, constructivism assessment gives students' ownership of what they learn, since learning is based on students' questions and explorations, and often the students have to opportunity to engage in designing the assessments as well. To improve the teaching-learning processes, tutors should use formative assessments to provide frequent feedback to both tutors and students. Therefore, a competency-based curriculum has created room for active learning that requires the use of formative assessment in which both the teaching and learning techniques and assessment methods are student-centred to enable meaningful learning.

### 3. MATERIALS AND METHODS

The study employed a qualitative research approach with the use of a descriptive survey design and three data collection methods namely: questionnaire, interview and focus group discussions. The purpose of using multiple data collection methods was to enhance validity of the findings from different categories of respondents and methods [28]. A total of fifty (50) respondents from two Teacher Colleges were sampled purposely based on their roles and positions in curriculum implementation. Questionnaires were administered to thirty (30) experienced tutors and twenty (20) Diploma students. Similarly, a semi-structured interview was scheduled with Academic Coordinators and Quality Assurance Coordinators, while focus group discussions were held with students to get more insights on the implementation of competency-based teaching in Teacher Colleges.

Finally, data were analyzed through the use of Statistical Package for Social Sciences (SPSS) software version 20 to make frequencies and percentages and content analysis accompanied

with verbatim quotes. For ethical consideration, a research clearance letter was sought from the Regional Administrative Secretary who introduced the researcher to the District Administrative Officers to the district where the colleges belong. Further, the District Administrative Officers introduced the researcher to the Teacher College Principals. Principals were informed on the purpose of the study and requested their consent then introduced the researcher to the sampled respondents. The respondents were asked to fill in consent form and those who signed for acceptance were involved in the study. The respondents were treated anonymously and the collected data were used only for the purpose of the study.

### 4. RESULTS AND DISCUSSION

The findings and discussions are presented based on the specific objectives of the study as indicated below:

#### 4.1 Tutors' Understanding of Competencies in Teacher Education Curriculum

The study explored tutors' understanding of the subject competencies taught in Teacher Colleges as described in particular syllabus. The understanding was measured through rating their responses against the competencies of the three subjects taught extracted from Computer Science Pedagogy, Communication Skills, and Education Studies curriculum. There were three options against each competency: disagree, undecided and agree, in which each respondent put a tick against one option. Out of 30 tutors sampled and supplied with questionnaires for the study, 29 (96.7%), responded this item while one skipped it. The results are presented in Table 1.

The analysis of the findings in Table 1 indicates that the majority of tutors had an understanding of the subject competencies as described in the syllabus based on the respective subjects they teach. For example, nearly 74.9% of tutors teaching Computer Science Pedagogy subject and 62.5% of tutors teaching Communication Skills seem to be aware of the subject competencies as described in respective syllabus. It was observed further that, 78.1% of tutors teaching Education Subjects, also demonstrated that had understanding of the subject competencies.

**Table 1. Tutors’ understanding of competencies of the respective subject (n=29)**

<b>Competencies (Computer Science Pedagogy)</b>	<b>Frequency and percentage (%)</b>		
	<b>Disagree</b>	<b>Undecided</b>	<b>Agree</b>
Analyze and interpret correctly ICS curriculum materials for teaching and learning in ordinary-level secondary schools	1(11.1)	1(11.1)	7(77.7)
Apply learner-centred approach, strategies, and techniques in teaching and learning ICS to learners including those with special needs	1(11.1)	1(11.1)	7(77.7)
Use ICT resources and technology for effective teaching and learning of ICS	-	2(22.2)	7(77.7)
Use appropriate assessment tools for effective assessment of students’ performance in ICS;	2(22.2)	1(11.1)	6(66.6)

  

<b>Competencies (Communication Skills)</b>	<b>Frequency and percentage (%)</b>		
	<b>Disagree</b>	<b>Undecided</b>	<b>Agree</b>
Interpret written and spoken discourse	-	1(25.0)	3(75.0)
Make effective oral presentations	-	2(50.0)	2(50.0)
Use study skills to gather information	-	1(25.0)	3(75.0)
Write good essays, letters, CVs, minutes, memos and reports	-	2(50.0)	2(50.0)

  

<b>Competencies (Education Subject)</b>	<b>Frequency and percentage (%)</b>		
	<b>Disagree</b>	<b>Undecided</b>	<b>Agree</b>
Apply knowledge of basic concepts in psychology, educational psychology, guidance and counselling in teaching and learning;	-	3(18.8)	13(81.2)
Apply curriculum theories in planning, implementation and evaluation of school curriculum;	-	2(12.5)	14(87.5)
Translate philosophical contributions of distinguished philosophers into day-to-day educational professional practices; and	-	5(31.2)	11(68.8))
Demonstrate organizational, leadership, and management skills in educational training	-	4(25.0)	12(75.0)

Tutors’ understanding of the subject competencies as per Teacher College curriculum, was also confirmed by one of the tutors teaching Computer Science Pedagogy who commented in the questionnaire that: *‘another competencies taught in this subject include; student-teacher’s ability to use computer knowledge and skills in preparing lessons and apply it in teaching and learning process....use computer tools to keep students’ records and personal learning’*. Another tutor teaching Education Subject added that: *‘Apart from that, other competencies we develop to our students include; to apply curriculum and teaching knowledge and skills to prepare and use various teaching and learning methods and assessment tools in teaching and learning’*.

The quotes above justify that, tutors were not only able to rate the competencies as shown in Table 1 but also mentioned extra competencies

of the subjects they teach. This proves that; tutors are aware of the competencies taught in Teacher Colleges as described in the syllabus of the respective subjects. In researchers’ own views, tutors’ understanding of the subject competencies appears to be one of the crucial factors in implementing competency-based education. Understanding the subject competencies provides a great opportunity for tutors to select appropriate teaching and learning techniques and assessment tools that engage students in the learning process.

Congruently, the analysis of findings in Table 1 indicates that 11.8% and 13.8% of tutors teaching Computer Science Pedagogy disagreed and were undecided towards the described subject competencies. In the same vein, 37.5% of tutors teaching Communication Skills and 21.9% of tutors teaching Education Subjects were undecided with the competencies to the

subjects they teach. These findings give the view that, some tutors were not aware of the competencies of the subject they teach and had no access to the subject syllabus. The same issue was also observed in tutors' comments in the questionnaire as one tutor mentioned; *"Remembering, understanding, applying, evaluating and creating"* as other competencies for Communication Skills.....and another tutor mentioned *'cooperative learning, collaborative skills, affective domain and, the cognitive domain'* as other competencies of Education Subjects.

The said subject competencies from the above quotes, were contrary to what has been described in the syllabus of the particular subjects. These findings imply that despite the majority of tutors being aware of the competencies of the subjects they teach, few tutors were not aware of the subject competencies. This can be described as one of the reasons for some tutors to remain using teacher-centred approach in teaching and learning process given the reason that, the selection of appropriate teaching and learning techniques depends largely on teachers understanding of the particular subject competencies.

The findings on tutors' lack of understanding of the competencies of the subjects they teach concur with Rutayuga [4] who asserts that, the way teachers teach and assess the competencies of their students is problematic as they teach somehow competency-based and somehow knowledge-based; so, it is confusing. For effective implementation of CBE tutors should understand the competencies of the subject they teach as described in the syllabus. This will help them to have a clear link among the competencies taught, proper use of teaching and learning techniques, and the selection of suitable assessment tools that measure the intended competency skills and knowledge of the specific subject.

#### **4.2 Teaching and Learning Techniques Used by Tutors to Implement CBE**

The current study also examined the teaching and learning techniques used by tutors to implement CBE at Teacher Colleges as

suggested from the particular subject syllabus. Tutors and students were supplied with questionnaires to rate the extent in which tutors use competency-based teaching and learning techniques in developing competency to students. There were three options: Never, sometimes and always against each of the competency based teaching and learning techniques extracted from literature review. The results from tutors and students are presented in Tables 2 and 3 respectively.

The analysis of the findings in Table 2 indicates that, case studies (60.0%) and role-play (60.0%) were sometimes used by tutors in teaching and learning process. The analysis of the findings show further that, the majority of tutors seem to use interactive teaching and learning techniques including individual assignment (96.7%), brainstorming (93.3%) and group work (83.3%). Similarly, think-ink-pair-share (66.7%), organized classroom discussions (66.7%), gallery walk (63.4%) and library search (53.3%) were also used in teaching and learning process. The use of multiple learners-centred approaches imply that students had a chance to actively engage in the process of teaching and learning.

In a subsequent interview with Internal Quality Assurance Coordinators on the use of teaching and learning techniques, it was confirmed more that tutors use activities-based techniques including group work, discussion, and presentations that put students at the centre of learning and students are informed about the competency intended to be learnt. He reported further that, in the process of learning, students are assigned to read textbooks and prepare their own learning materials through portfolio collection and the role of tutors was only to guide and assist students to learn.

Similar findings on the use of interactive teaching techniques were reported further in an interview with one of the Academic Coordinators who had the following to say; *"In most cases, tutors use various teaching methods like debate, interview me technique, jig saw, inside and outside the circle, and songs which are among of the best interactive methods of teaching and learning that develop discovery learning, creativity, innovation and create confidence to students"*.

**Table 2. Tutors’ responses on Techniques frequently used to implement CBTL (n=30)**

Techniques	Frequency and percentage (%)		
	Never	Sometimes	Always
Individual assignments	-	1(3.3)	29(96.7)
Group work	-	5(16.6)	25(83.3)
Lecture	1(3.3)	21(70.0)	8(26.7)
Role-play	3(10.0)	18(60.0)	9(30.0)
Library search	-	14(46.7)	16(53.3)
Think-Ink-Pare-Share	1(3.3)	9(30.0)	20(66.7)
Case Studies	1(3.3)	18(60)	9(36.7)
Organized classroom discussions	-	10(30.3)	20(66.7)
Gallery walk	1(3.3)	10(33.3)	19(63.4)
Brainstorming	-	2(6.7)	28(93.3)

The assertion above suggests that, the majority of tutors use teaching and learning techniques that encourage interaction between tutors and students in building the intended subject competency to the students. The very interesting thing from the above quotes is that the role of tutors seems to be that of creating a friendly classroom learning environment that emphasizes collaboration and allows students to learn by sharing their ideas and experiences through reading books, discussion, and presentation. This gives the view that some tutors have effective facilitation techniques in implementing a competency-based education in Teacher Colleges.

The findings on the use of interactive teaching and learning techniques are in line with the study of Mkonongwa [3], who observed that competency-based teaching should be shifted to a learner-centred approach in which the learner takes control of the learning process while the teacher becomes a facilitator of the learning process. This implies that implementing CBE requires the use of multiple interactive techniques including project work, group work, and presentation that engage many students in learning and make it easy to observe the students learning outcomes.

However, the student’s responses on techniques employed by tutors during teaching and learning were a little bit contrary to that of the tutors. The analysis of the findings from students’ responses suggests that, tutors always used group work (80.0%), brainstorming (65.0%), and individual assignment (50.0%) in classroom teaching as revealed in Table 3.

The students’ responses in Table 3 further demonstrate that, tutors sometimes used gallery walk (60.0%), think-ink-pair-share (55.0%) during

classroom teaching. However, in contrary to tutors’ responses in Table 2, individual assignments (50.0%) were not always used in classroom teaching. Students added that, sometimes tutors employed punctuated lecture (60.0%), role play (60.0%) and case studies (50.0%), while other techniques like library search (40.0%), case studies (35.0%) and punctuated lecture (30.0%) had never been used in teaching and learning process.

These findings imply that, though tutors seem to be familiar with different competency-based teaching and learning techniques, but very few techniques were always used during the teaching and learning processes. This was also observed by Ndimbo, (2022), who claims that, simple questions and answers, group discussion and lecture were the predominant methods used by teachers to teach pupils in spite of the teachers knowing other teaching methods. The use of few teaching and learning techniques by tutors might not only affect student-teachers’ learning but also the implementation of competency-based education in primary and secondary schools where the graduates from Teacher Colleges are placed to teach during their Bloc Teaching Practice and when employed. Moreover, it affects the attitudes of pre-service teachers on their career, and goals and objectives of paradigm shift from content to competency-based education in Tanzania.

Conversely, the emphasis on using interactive learning techniques were also confirmed by students during focus group discussion. The majority (almost 80.0%) of students reported that, the use of interactive teaching and learning methods like jig-saw method where students are divided into small groups and discuss the work given to them and sharing what one group has discussed to another group, make it simple to understand the competency taught.

**Table 3. Students' responses on Techniques frequently used by Tutors in T/L (n=20)**

Techniques	Frequency and percentage (%)		
	Never	Sometimes	Always
Individual Assignments	-	10(50.0)	10(50.0)
Group work	-	4(20.0)	16(80)
Lecture	4(20.0)	8(40.0)	8(15.0)
Role-play	5(25.0)	12(60.0)	3(30.0)
Library search	8(40)	8(40.0)	4(30.0)
Punctuated lecture	6(30.0)	12(60.0)	2(10.0)
Think-Ink-Pare-Share	1(5.0)	11(55.0)	8(40.0)
Case Studies	7(35.0)	10(50)	3(15.0)
Organized classroom discussions	-	5(25.0)	15(75.0)
Gallery walk	1(5.0)	12(60.0)	7(35)
Brainstorming	-	7(35.0)	13(65.0)

Similar comments emphasizing on the use of interactive teaching and learning techniques were reported in focus group discussion as one of the students was quoted saying that: *“The use of interactive methods in teaching and learning like demonstration methods is also favorable in developing competencies to students because the involvement of students helps to understand and gain knowledge through their sense organs such eyes, and ears from the experienced person....”* Likewise, it was reported by another student who said: *“The use of debate, field practice as well as question and answer techniques encourage us to participate in learning and help us to develop critical thinking and increase confidence to us as we learn by doing or observe real things”*. Equally, another student said that: *“In developing competency to students the use of lecture method denies students participation in classroom learning, hence students cram the concept taught instead of understanding it”*.

The above interview quotes recommend that despite tutors employing few techniques, students are aware of various collaborative teaching and learning techniques that are essential in enhancing students' participation in learning. This was verified by students' ability to mention other collaborative techniques and illustrated how they can be used to help students to acquire the intended subject competency during teaching and learning processes.

Notwithstanding, the findings on the ability of pre-service teachers to mention the competency-based teaching and learning techniques are contrary to some previous studies. For example a study by Kafyulilo et al. [6] observes that; pre-service teachers perceived their understanding and ability to implement competency-based

teaching approach as high, but during interviews, it was revealed that they had difficulties in explaining some competency-based concepts. In researchers' own view, less use of multiple teaching and learning techniques by tutors may cause some student-teachers to have a narrow understanding of competency-based concepts. In addition to that, student-teachers may lack the ability to select appropriate teaching and learning techniques in building the intended competency skills and knowledge as described in the syllabus.

Correspondingly, inappropriate training for tutors, tutor-student ratio, and shortage of teaching and learning facilities were mentioned by nearly 65.0% of participants that, were some of the causes hindering effective implementation of CBE in Teacher Colleges. This implies that there is irregular training for tutors on CBE especially for private Teacher Colleges as the majority of them had no opportunity to attend a training on Competency-Based Education and Training, hence they lack appropriate skills for implementing CBE. Therefore, the student-tutor ratio, and teaching and learning facilities should be improved to provide a smooth implementation of CBE in Teacher Colleges.

### 4.3 Assessment Tools Used by Tutors to Assess the Mastery of Competencies

Finally, the study evaluated assessment tools used by tutors to assess students' mastery of the intended competency. The data in Table 4 indicates that tutors always use multiple assessment tools including classroom tests (86.7%), group assignments (93.3%), classroom presentations (76.7%), individual assignments (83.3%), project works (63.4%) and written assignments (76.7%) to assess students'



mastery of the taught competency. The analysis of findings shows further that there is the use of weekly tests (63.3%), terminal examinations (86.7%), and national examinations (90.0%) in assessing students learning as shown in Table 4.

It appears from the findings that, the majority of tutors seem to use multiple interactive assessment tools that make students perform and demonstrate the taught competency of a specific subject. Likewise, the findings indicate further that tutors also preferred most the use of terminal and national examinations to assess students' understanding of the taught competency.

Congruently, a subsequent interview with Internal Quality Assurance Coordinators confirmed further that in most cases, tutors use individual assignments, group assignments, midterm tests, and examinations to assess students' learning. However, it was informed that multiple assessment tools in teaching and learning processes was not used by all tutors. Some tutors were reported to be not exposed to several assessment tools due to lack of training on CBE and for them, teaching and learning were no longer collaborative, and had less use of multiple assessment tools when assessing students' learning progress.

Differences on the use of assessment tools among tutors, was also observed in previous studies such as a study by Forsido [29] who maintains that there was a huge difference among teachers teaching the same subject in assessing students' performance and the validity of the whole assessment falls under question. Being not cemented, this can cause ineffective assessment of the intended competency to students learning. In the researchers' own view, the lack of exposure to other assessment tools by some tutors may be due to the reason that not all tutors had a chance to attend training on Competency-Based Education and Training (CBET) due to lack of funds to finance the training to all tutors at once, thus they still rely on traditional assessment methods.

Furthermore, with regard to students' responses on assessment tools used by tutors, the analysis

of the findings reveals that, majority of students had a varying response to those of tutors as depicted in Table 5 bellow. It is observed in Table 5 that tutors used group assignments (80.0%), individual assignments (75.0%), classroom written assignments (50.0%) and terminal examinations (90.0%) to assess students learning. Similarly, final examinations (95.0%) were reported by students as the dominant assessment tool always used by tutors to assess student's mastery of the taught competency. In addition, the analysis of the findings indicates that sometimes tutors used classroom tests (60.0%) while research project work (65.0%) had never been used by tutors to assess students learning.

The above findings suggest that, though tutors seemed to be familiar with multiple assessment tools, they always opted for group assignments, individual assignments, and classroom written assignments to assess students' learning progress. This is contrary to CBE which emphasizes regular student assessment via the use of multiple assessment tools in teaching and learning to foster students' mastery of the intended subject competency. The mastery of competencies develops permanently once adequate assessment activities including classroom tests, classroom presentations, research work projects, oral tests, and classroom written assignments, and exercises are offered and students are given enough time to practice knowledge and skills learnt throughout the learning processes.

Unlike monthly tests, terminal and national examinations give a general feedback on students' learning and understanding of the competencies taught in a month, a term, or after the end of the course. During an interview with one of the Academic Coordinators lamented that, the use of national examinations was noticed to have some weaknesses. Some questions in the final examination, do not reflect the competencies stipulated in the syllabus. He gave an advice that the National Examination Council of Tanzania (NECTA) which is the assessment body should assess the mastery of competencies by setting the examination questions that measure the intended competency skills and knowledge.

**Table 4. Tutors’ responses on assessment methods frequently used to assess students (n=30)**

Methods	Frequency and percentage (%)		
	Never	Sometimes	Always
Classroom Tests	1(3.3)	3(10.0)	26(86.7)
Group assignments	-	2(6.7)	28(93.3)
Classroom presentation	-	7(23.3)	23(76.7))
Individual assignment	-	5(16.7)	25(83.3)
Project works	2(6.6)	9((30)	19(63.4)
Written assignments	3(10.0)	4(13.3)	23(76.7)
Observation Checklist	4(3.3)	12(40.0)	14(46.7)
Oral tests	6(20.0)	15(50.0)	9(30.0)
Weekly tests	7(23.3)	10((33.3)	13(63.3)
Terminal Examinations	-	4(13.3)	26(86.7)
National examination	-	3(10.0)	27(90.0)

**Table 5. Students’ responses on assessment methods frequently used (n=20)**

Strategies	Frequency and percentage (%)		
	Never	Sometimes	Always
Classroom Tests	2(10.0)	12(60.0)	6(30.0)
Group assignments	-	4(20.0)	16(80.0)
Classroom presentations	10(50.0)	7(35.5)	3(15.5)
Individual assignments	-	5(25.0)	15(75.0)
Research work project	11(65.0)	6(30.0)	3(15.0)
Classroom written assignments	3(15.0)	7(35.5)	10(50.0)
Observation Checklist	9(45.0)	6(30.0)	5(25.0)
Oral tests	13(65.0)	5(25.0)	2(10.0)
Weekly tests	7(35.0)	8(40.0)	5(25.0)
Terminal Examinations	-	2(10.0)	18(90.0)
Final examinations	-	1(5.0)	19(95.0)

In researchers’ own understanding, depending much on the terminal and national examinations in assessing students’ learning may discourage students’ self-assessment and denies immediate feedback to students learning and can have a negative consequence to students’ learning. Competencies such as “make an effective oral presentation and write good essays, letters, Curriculum Vitae, minutes, memos and reports” as described in the syllabus of Communication Skills, need to be assessed during the learning process with the use of oral tests, classroom presentation and classroom written assignments as they need to be observed and practiced during teaching and learning processes.

It was mentioned further by one of the Academic Coordinators that tutors and students had the mindset that, they use mid-term, terminal, mock,

and pre-national examinations for the purpose of preparing students to perform well in the final examinations., This should be changed to formative assessment and focus on assessing students’ daily mastery of the intended competency built during teaching and learning processes.

Tutors’ use of multiple assessment tools gives student-teachers an opportunity to be competent and apply appropriate assessment tools in the real world of work and improve the quality of teaching and learning at their duty stations. This will improve students learning as the purpose of assessment should be of knowing students’ abilities in evidencing the mastery of the learned competency, check their learning progress, and giving instant feedback to both tutors and students about teaching and learning processes. Hence, our colleges will produce competent

graduates who fit and can compete in the current labour market demand.

The findings on the use of multiple assessment tools have been emphasized in many previous studies including a study by Forsido [29] who maintains that using a variety of assessments allows a teacher to determine which instructional strategies are effective and can be modified during teaching and learning processes and improve classroom practices by assessing one's own teaching practice. Thus, tutors should consider students' assessment as an ongoing process in which their competencies are unceasingly constructed and assessed, and are expected to be observed in duty stations.

## 5. CONCLUSION AND RECOMMENDATIONS

The study sought to investigate the practice of competency-based teaching in Tanzania Teacher Colleges. The analysis of the findings indicates that, most of the tutors are aware of the competencies to be developed to students and the competency-based teaching and learning techniques in their respective teaching subjects as prescribed in the teacher education curriculum. However, such tutors rarely employed the competency-based teaching and learning techniques in their lessons which hamper the development of the intended competencies in the teacher education programme. The most use of content based teaching and learning techniques in the implementation of competency-based curriculum violate not only the principles of constructivist theory which require learners to develop the intended competencies through different competency-based teaching and learning techniques, but also put at jeopardy the goals and objectives of the paradigm shift from content to competency-based education in Tanzania. Therefore, the study concludes that, since the river cannot flow higher than its source, tutors understanding of the intended competencies and the competency-based teaching and learning techniques without actual use of such techniques does not impact on the preparation of the competent teachers required to implement competency-based curriculum in schools. From this conclusion, it is recommended that, in-service training on Competency-based teaching should be conducted to tutors and management of Teacher Colleges. The practical interview should be conducted to the applicants for tutorship in Teacher Colleges instead of relying

on direct placement from University graduates or transferring teachers from schools to Teacher Colleges basing on their level or years of experiences. In the light of the findings and conclusion of this study, further study may be conducted on developing measuring scales for competency development in teacher education.

## ETHICAL APPROVAL

As per international standard or university standard written ethical approval has been collected and preserved by the author(s).

## COMPETING INTERESTS

Authors have declared that no competing interests exist.

## REFERENCES

1. Hartig J, Klieme E, Leutner D, editors. Assessment of competencies in educational contexts. Hogrefe Publishing; 2008.
2. Mosha HJ. A case study of learning materials used to deliver knowledge and skills– or competency-based curricula (in Tanzania) ADEA. Working Document, Doc 1.5.05; 2012.
3. Mkonongwa LM. Competency-based teaching and learning approach towards quality education.
4. Rutayuga AB. The emerging Tanzanian concept of competency: conditions for successful implementation and future development (Doctoral dissertation, Institute of Education, University of London).
5. Drisko JW. Competencies and their assessment. *Journal of Social Work Education*. 2014;50(3):414-426.
6. Kafyulilo AC, Rugambuka IB, Moses I. Implementation of competency-based teaching in Morogoro teachers' training college, Tanzania. *Makerere Journal of Higher Education*. 2013;4(2):311-26.
7. Idrissi MK, Hnida M, Bennani S. Competency-based assessment: from conceptual model to operational tool. In *Learning and performance assessment: Concepts, methodologies, tools, and applications*. IGI Global. 2020;108-129.
8. Nzima I. Competency-based Curriculum (CBC) in Tanzania: Tutors' Understanding and Their Instructional Practices (Doctoral dissertation, Linnaeus University Press); 2016.

9. United Nations Educational, Scientific, and Cultural Organization, Paris (France). Education for All by 2015: Will We Make It?. ERIC Clearinghouse; 2007.
10. Ion G, Cano E, Cabrera N. Competency assessment tool (CAT). The evaluation of an innovative competency-based assessment experience in higher education. *Technology, Pedagogy and Education*. 2016;25(5):631-48.
11. Tanzania, Miburani: Dar es salaam University College of Education (DUCE). 2018;12.
12. Rieckmann M, Hericks N. Competency based education and its contributions to quality enhancement in higher education. In Conference: International Consortium for Educational Development (ICED) and HELTASA Joint Conference. Cape Town, South Africa; 2016.
13. Tanzania Institute of Education. Syllabus for diploma course in secondary teacher education for Computer Science Pedagogy. Dar es Salaam; 2020.
14. Losioki BE. Principles for assessing competency-based teaching and learning. The 10<sup>th</sup>Quality Education Conference; 2018.
15. Munoz DR, Araya DH. The challenges of competency-based assessment in the educational field. *Educação e Pesquisa*. 2017 Jul 27;43:1073-86.
16. Edson V, CK. Shawa M. Perceptions and factors influencing teaching and learning in Kyela secondary schools in Tanzania. *Asian Journal of Education and Social Studies*. 2021;25(3): 17-28. Available:<https://doi.org/10.9734/ajess/2021/v25i330601> 2021
17. Lupeja T, Komba S. Implementation of competency based curriculum in the context of colonial education system in Tanzania. *International Journal of Research Studies in Education*. 2021; 10(5):33-43.
18. Brooks JG, Brooks MG. In search of understanding: The case for constructivist classrooms. Ascd; 1999.
19. Care E, Griffin P, McGaw B. Assessment and teaching of 21<sup>st</sup>-century skills. Dordrecht: Springer; 2012.
20. HakiElimu. The Significance of quality Teacher training for the development of quality education: Preparing Teachers for the ever-changing world. Dar es Salaam; 2009.
21. Lukindo JJ. Exploring competency based education (CBE) in rural secondary schools in tanzania: english language teachers' conceptions and experiences. *Journal of Education and Practice*. 2016;7(29):62-7.
22. Komba SC, Mwandanji M. Reflections on the implementation of the competency-based curriculum in Tanzanian secondary schools; 2015.
23. Wragg EC. Assessment and learning in secondary schools. London: Routledge Falmer; 2001.
24. Makunja G. Adopting competency-based curriculum to improve quality of secondary education in Tanzania: "is it a dream or reality"?; 2015.
25. Bada SO, Olusegun S. Constructivism learning theory: A paradigm for teaching and learning. *Journal of Research & Method in Education*. 2015;5(6):66- 70.
26. Berry R. Rethinking assessment with purpose in mind; 2005.
27. Tam M. Constructivism, instructional design, and technology: Implications for transforming distance learning. *Journal of Educational Technology & Society*. 2000; 3(2):50-60.
28. Kroll T, Neri M. Designs for qualitative methods research. *Qualitative Methods Research for Nursing and the Health Sciences*. 2009;31.
29. Forsido DM. Practices and challenges in implementing continuous assessment in teaching english at grade 11 in Alamura and Tabor Preparatory Schools, Hawassa City Administration. A Thesis. Hawassa; 2019 Jun.

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